

Stormwater Credit Manual

CITY OF AUGUSTA, GEORGIA



Prepared by



Stormwater Credit Manual

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1.0 Background

Stormwater Responsibilities

The Augusta Engineering Department (AED) manages the stormwater program within Augusta-Richmond County (Augusta) with the exception of Fort Gordon, which manages its own municipal stormwater system. The Augusta Planning and Development Department oversees the floodplain management program that includes flood mapping and mitigation programs.

The goals of the Augusta Engineering Department include both the protection of the quality of the surface waters in Augusta as well as reducing the risk of flood damage to citizens and property. As such, they have construction, inspection, and maintenance oversight for stormwater drainage systems including thousands of structures such as culverts, catch basins, and water quality treatment facilities. These departments are also responsible for regulating new development and redevelopment of properties within Augusta and for meeting State and Federal requirements regarding the quality of creeks and streams within their jurisdiction.

Stormwater Service Charge

The Augusta stormwater service charge is based on the amount of impervious area (IA) – rooftops, parking, etc. on a property. For single-family residential properties (SFR) Augusta uses a simplified fee structure consisting of two tiers that represent different amounts of impervious area on the property:

Tier 1 = 400 - 4,400 square feet of impervious area (IA)

Tier 2 = more than 4,400 square feet of impervious area (IA)

All non-single family residential (NSFR) properties will pay on the basis of number of equivalent residential units (ERUs) on a parcel rounded to the nearest whole ERU. One ERU is 2,200 square feet of impervious area. Thus, for example, a property with 9,680 square feet of estimated impervious area would pay a fee based on $9,680 \div 2,200 = 4.4$ ERUs, which is rounded to 4 ERUs. When completing a credit application, the stormwater service charge is calculated in this manner prior to calculation of credits.

Properties containing 400 square feet or more of impervious area are considered to be improved properties. While ERU calculations are generally rounded down to the nearest whole number, a minimum of 1 ERU will be assigned to improved properties. Thus, for example, a property with 1,980 square feet of estimated impervious would pay a fee based on $1,980 \div 2,200 = 0.9$ ERU, which is reset to the minimum of 1 ERU. Properties containing less than 400 square feet of impervious area will be treated as unimproved properties and will not receive a bill.

Service Charge Exemptions

In accordance with the Stormwater Management Ordinance, no public or private property is exempt from storm water utility service charges with the following exceptions:

- (a) Land containing less than four hundred (400) square feet of impervious area shall be exempt from storm water service charges.
- (b) Railroad tracks shall be exempt from storm water service charges. However, railroad stations, maintenance buildings, or other developed land used for railroad purposes shall not be exempt from storm water service charges.

- (c) Public and private roadways, including the portion of private driveways greater than two hundred (200) linear feet, shall be exempt from storm water service charges.
- (d) Ft Gordon, Georgia including contiguous properties owned or operated as part of Fort operations shall be exempt from the storm water service charge.

Owners of properties that meet one or more of the exemptions above and who receive a bill for the user fee may request in writing that AED investigate the applicability of the stated exemption and that the user fee be removed for the property. Written requests must be submitted to the address listed in Section 3.0. For properties that upon examination are determined to meet the criteria for exemption will be entitled to a refund of user fees paid for a period not to exceed six (6) months.

2.0 Stormwater Credits

What is a Stormwater Credit?

A stormwater credit is a conditional reduction in the stormwater service charge based on the proper construction and continuing presence of an effectively maintained and approved on-site stormwater facility that reduces the impact of the runoff from impervious area, and thus the overall cost of providing service. The credit is applied only to the portion of a site's impervious area treated.

Construction of an effective stormwater facility limits the impact to a stormwater drainage system by reducing peak rates of runoff, reducing total runoff volume, and/or removing pollutants. These measures can include on-site practices such as detention areas for flood control and other best management practices (BMPs) such as wet ponds, rain gardens, and other approved designs that manage stormwater quality.

Credits are available only to non-single family residential (NSFR) properties. The reduced impact of single family residential (SFR) properties due to the generally greater amount of grassy area is recognized within the rate structure itself. However, any SFR property that wishes to apply for and obtain a credit can request to be reclassified as an NSFR property and therefore be treated as an NSFR property in regards to fee assessment and availability of credits. Requests for reclassification must be made in writing to the Augusta Engineering Department. Prior to making a request for reclassification, the following guidelines should be considered:

1. NSFR properties are assigned a minimum of 1 ERU, which correlates to 2,200 square feet of impervious area. The ERU estimate for NSFR properties rounds down to the nearest whole ERU. Therefore, a SFR property must have a minimum of 4,400 square feet of impervious area to realize a financial benefit from user fee credits.
2. The stormwater quantity or quality controls serving as the basis for a credit must reside on the SFR property requesting the reclassification and the controls must be maintained by the property owner.
3. A homeowners association may initiate a reclassification request based on stormwater quantity or quality controls in common areas which serve multiple properties. However, the only properties that can be included in the request are those that actually drain, in

whole, to the stormwater controls. The resultant credit(s) will be applied to the user fee for each individual property.

Available Credits

Stormwater credits for peak flow reduction and water quality impact reduction are available to non-single family residential properties (NSFR). Design guidance for water quantity and quality facilities and procedures to calculate the associated water quantity and quality reductions, are available in the Augusta Stormwater Technical Manual and Augusta Stormwater Management Plan. The available credits are:

1. Detention Credit – up to 40%

Stormwater detention facilities provide a reduced demand on the downstream drainage systems through the reduction of flow rates leaving the site. Detention facilities designed, constructed, and maintained in adherence to the current stormwater detention standard in Augusta are eligible for this credit. Current requirements include the provision for adequate storage to match peak outflow for pre-development conditions for the post-development site for the 2, 5, 25, and 50-year storm events. The facility must also be capable of safely passing the 100-year storm event.

Older detention facilities that met previous detention requirements, but not the current detention requirements, may be eligible for a partial credit of 15%. To receive partial credit, documentation must be provided that demonstrates compliance with previous requirements.

2. Watershed Protection Credit – 5%

Augusta has identified specific watersheds where urban development has more significantly impacted stormwater runoff quantity and quality than in other places. The three watersheds include Rae's Creek Basin, Rocky Creek Basin, and Rock Creek Basin. Additional design requirements for stormwater detention are required in these impacted watersheds. The release of stormwater from storage facilities must be limited to 90-percent of the pre-development rates for the 2, 5, 25, and 50-year storm events. The facility must also be capable of passing the 100-year storm event. Stormwater detention facilities designed and constructed to this higher standard are eligible for a watershed protection credit in addition to the detention credit, throughout the City, regardless of the watershed where they are located.

3. Industrial Credit - 5%

An industrial credit is available to properties that are required by the State of Georgia to secure and maintain an Industrial Stormwater General Permit (IGP) under the National Pollutant Discharge Elimination System (NPDES) program based on their Standard Industrial Classification (SIC) and are required to perform sampling and testing. The current facility Stormwater Pollution Prevention Plan (SWPPP) and Annual Report required by the State must be submitted to AED to receive the credit. Submission of updates to these reports must be submitted annually, as applicable, to maintain the credit and the permit must be kept current and in good standing.

4. Water Quality Credit - 15%

A water quality credit is available to properties that meet water quality requirements in the current Augusta Stormwater Management Plan, which requires treatment for runoff from the first 1.2 inches of rainfall.

5. Education Credit

Education credits are available to qualified NSF facilities. Details for this credit will be released at a later time.

Credits may be combined, however the total of all credits shall not exceed 65% of the property's user fee. Credits do not expire but may be revoked, in whole or in part, if the conditions qualifying a property for a credit are not maintained. While credits do not expire, they are specifically granted to the property owner who made the application. Thus, a reapplication for credit is required upon a change in property ownership.

Impervious Area (IA) Adjustments

AED will review all properties at least once every five years to ensure Users are being billed for the correct amount of Impervious Area. Upon completion of the periodic review, if a User's amount of Impervious Area has changed, AED will adjust User's stormwater fee accordingly to reflect the updated amount of Impervious Area.

Users may request a reassessment of their Impervious Area calculation by submitting a written request to AED at the address listed in Section 3.0. Requests for a reassessment may be based on one or more of the following conditions:

1. **Impervious Area Delineation.** Impervious areas include developed areas of land that prevent or significantly impede the infiltration of storm water into the soil. Typical impervious areas include, but are not limited to: roofs; sidewalks; walkways; patios; swimming pools; private driveways and roads; parking lots; access extensions; alleys and other paved, engineered, compacted or traveled gravel surfaces containing materials that prevent or significantly impede the natural infiltration of storm water into the soil. Users who believe that the delineation of impervious area on the property is in error may request an impervious area review.
2. **Dirt Roads.** It is the policy of AED that roadways and driveways that are comprised of compacted earth (dirt) will be excluded from the delineation of impervious areas. Compacted earth parking areas are not included in this policy since these parking areas are not permitted in Augusta by code. Users whose property includes a dirt drive or roadway may request that a reassessment of impervious area be performed in order to assure that these dirt travel ways are excluded from the calculation of impervious area on the property.
3. **Disconnected Residential Outbuildings.** It is the policy of AED that outbuildings on large residential properties will be excluded from the delineation of impervious areas if the following conditions are met:
 - The outbuilding must be disconnected from the impervious area represented by the primary residence and associated driveway and parking;

- The outbuilding must drain to a vegetated area that meets the criteria for a Vegetated Filter Strip in accordance with the Coastal Supplement to the Georgia Stormwater Management Manual ; and
- The Vegetated Filter Strip must be located outside of the stream buffer as defined by the Augusta Soil Erosion, Sedimentation and Pollution Control Ordinance.

3.0 How to Apply

Applicants must complete a Credit Application Form (Appendix A) and the appropriate Credit Calculation Forms (Appendix B). Backup documentation is required on these forms, include pictures of the stormwater control structures, and submit all required documentation to the City at the following address:

***Attn: Stormwater User Fee Credit
Augusta Engineering Department
535 Telfair Street, Building 4000
Augusta, GA 30901
(706) 796-5040***

Upon receipt of a credit application, a sufficiency review will be conducted within 30 days of the receipt of the application to determine if the application is substantially complete. If the application is not complete, additional information will be requested from the applicant. The application must be complete before a technical review will be completed. Once an application has been deemed complete, the applicant will be notified within 60 days whether the credit has been approved or denied. If approved, the credit will be activated in the next billing cycle. If denied, the applicant has 60 days to file an appeal with the Director of the Augusta Engineering Department.

Sufficient documentation must accompany the Credit Application Form to furnish proof of critical contributing impervious area, design dimensions and calculations. It is the responsibility of the applicant to perform calculations and/or measurements to certify the eligibility of the site and structure(s) for credit.

Original sets of development plans, plus certification and documentation that the current control facility and structure have been constructed and maintained as designed, shall be submitted. Where these are not available, new measurements, calculations and other documentation must be performed by a Georgia Licensed Professional Engineer experienced in such designs.

Applicants who are proposing to construct new systems to receive a credit from the stormwater service charge must comply with all current local, state and federal design standards, regulatory review and permitting requirements. As-built certification conforming to design stamped and signed by Georgia Licensed Professional Engineer shall be submitted.

4.0 Maintenance and Inspection

Stormwater structural controls are only effective if they are properly maintained to ensure they perform as designed. The City may request an inspection of the structural control at any time, as granted by the applicant at the time of application for credit. The City reserves the right to suspend an existing credit upon inspection of a structural control that is found to be non-compliant with maintenance standards, until such time that the property owner performs remedial actions and submits a renewal application for credit.

Once a credit is earned, it may be continued as long as the facility for which it is given is maintained to perform as approved. Therefore, the applicant must ensure the functionality of the structural control annually in order to continue receiving the stormwater credit. Annual documentation of maintenance and functionality must include an Annual Maintenance Inspection Report (Appendix C), as applicable, prepared and signed by a trained professional and photographic evidence of the existing condition of the stormwater facility. For this purpose, a trained professional is a person who holds one of the following licenses, certifications, or training:

- Georgia Professional Engineer (PE),
- Certified Professional in Erosion and Sediment Control (CPESC),
- Qualified Compliance Inspector of Stormwater (QCIS), or
- Georgia Soil and Water Conservation Commission (GASWCC) Erosion and Sedimentation Certification Program.

5.0 Resources and Guidance

Stormwater facilities within the Augusta-Richmond County stormwater service area must be designed to meet or exceed the requirements of the following regulatory documents:

- [Stormwater Management Ordinance](#), July 21, 2015
- [Stormwater Management Plan, Technical Manual](#), June 1999
- [Soil Erosion, Sedimentation and Pollution Control Ordinance](#), March 20, 2012
- [MS4 Stormwater Management Program](#), October 2012

Additional [Stormwater Technical Documents](#) are available from the City of Augusta.

Pre-approved design guidance documents for BMPs as discussed in Section 2.0 include:

- [Coastal Supplement to the Georgia Stormwater Management Manual](#)
- [City of Portland Stormwater Management Manual](#)
- [LID Technical Guidance Manual for Puget Sound](#)
- [Guidance documents from the LID Center](#)
- [Guidance documents from North Carolina State University stormwater engineering group](#)

Appendix A

Credit Application Form

Stormwater User Fee Credit Application Form (Form A)

Owners Information		
Full Name:	<div style="display: flex; justify-content: space-between; width: 100%;"> Last First M.I. </div>	
Address:	<div style="display: flex; justify-content: space-between; width: 100%;"> Street Address Apartment/Unit # </div>	
	<div style="display: flex; justify-content: space-between; width: 100%;"> City State Zip Code </div>	
Phone: ()	Email Address: _____	
Mailing Address: _____ (if different than property address)		
Parcel ID Number _____		
Credit Information (check one)		
<input type="checkbox"/> This is the first credit application for this property. <input type="checkbox"/> This is a reapplication after a credit suspension, credit denial, or change of ownership.		
Type of Credit (check all that apply)		
<input type="checkbox"/> Detention Credit (up to 40%) <input type="checkbox"/> Credit documentation form(s) included <input type="checkbox"/> Annual Maintenance Inspection Form included	<input type="checkbox"/> Watershed Protection Credit (5%)	
<input type="checkbox"/> Water Quality Credit (15%) <input type="checkbox"/> Credit documentation form(s) included <input type="checkbox"/> Annual Maintenance Inspection Form included	<input type="checkbox"/> Education Credit Details for this credit will be provided at a later time.	
<input type="checkbox"/> Industrial Credit (5%) <input type="checkbox"/> Notice of Coverage from the State of Georgia included <input type="checkbox"/> Current Stormwater Pollution Prevention Plan (SWPPP) included <input type="checkbox"/> Most recent Annual Report submitted to the State of Georgia included		
Owner Certification		
<p>By signing below, I hereby certify that I own or live at the property subject to the stormwater service charge and I further declare, under penalty of perjury, that the information provided in this application is the truth to the best of my knowledge and belief. I also grant the City access to the property at any time to inspect the stormwater control structure(s). If the services of a certified professional were required/used their seal and/or signature is affixed to submitted information.</p>		
_____ Signature		_____ Date

Appendix B

Credit Documentation Forms

Stormwater User Fee Detention Credit Documentation (Form B)

Owners Representative (Engineer)

Full Name: _____

Last	First	M.I.
------	-------	------

Address: _____

Street Address	Apartment/Unit #
City	State Zip Code

Phone: () _____ Email Address: _____

Fax: () _____ Georgia PE License Number: _____

Impervious Area Summary (attach site plan)

Total Site Area (acres): _____ Total Site Impervious Area (acres): _____

Paved Area (acres): _____ Roof Area (acres): _____ Other IA (acres): _____

Explain Other Impervious Area:

Stormwater Facility Description (attach separate sheet for each facility)

Facility Parcel ID: _____

Description of Facility:

Hydrologic Characteristics (attach drainage area map)

Information below shall pertain to the contributing drainage to the facility, not the entire site.

☐ Rational Method☐ SCS Curve Number Method

Pre-Development Characteristics

Drainage Area (acres):

Runoff Coefficient: (composite Rational C factor or SCS Curve Number)

Time of Concentration: (minimum of 5 minutes)

Rainfall Intensity (in/hr): (Rational Method only)

Storm Duration (hours): (SCS Method only)

	2-YR	5-YR	25-YR	50-YR	100-YR
Peak Flow (cfs)					

Post-Development Characteristics

Drainage Area Impervious Area (acres): _____

Paved Area (acres): _____ Roof Area (acres): _____ Other IA (acres): _____

Explain Other Impervious Area: _____

Runoff Coefficient: _____ (composite Rational C factor or SCS Curve Number)

Time of Concentration (min): _____ (minimum of 5 minutes)

Rainfall Intensity (in/hr): _____ (Rational Method only)

Storm Length (min): _____ (Rational Method only)

Detention/Retention Facility Data (attach all calculations)

Facility Storage Volume at Overflow (ft³): _____

☐ This facility qualifies for the Watershed Protection Credit

	2-YR	5-YR	25-YR	50-YR	100-YR
Peak Inflow (cfs)					
Peak Outflow (cfs)					

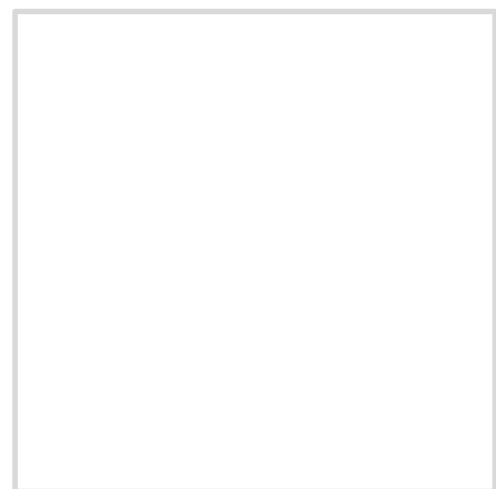
Attach stage-discharge-storage information in tabular form, storage volume calculations, outlet description, overflow description, runoff calculations, and all other pertinent information necessary to perform a detailed review.

Engineer's Certification

I certify under penalty of perjury that this document and all attachment including calculations, technical details, and other associated information were prepared with my direction or direct supervision in according with a system designed to ensure that qualified personnel properly gathered and evaluate the information submitted. I further certify under penalty of perjury that Stormwater Management Facility/Stormwater Control Measure has been constructed in general accordance with the approved engineering plans and is functioning as designed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature (Georgia PE)

Date



Engineer's Seal

Engineer's Certification

I certify under penalty of perjury that this document and all attachment including calculations, technical details, and other associated information were prepared with my direction or direct supervision in according with a system designed to ensure that qualified personnel properly gathered and evaluate the information submitted. I further certify under penalty of perjury that Stormwater Management Facility/Stormwater Control Measure has been constructed in general accordance with the approved engineering plans and is functioning as designed. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature (Georgia PE)

Date

Engineer's Seal

Appendix C

Annual Maintenance Inspection Report Forms

Annual Maintenance Inspection Report (Form C) Stormwater Ponds

Applicant Information				
Site Name: _____		Owner Change Since last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Owner Name: _____				
Last	First	M.I.		
Address: _____				
Street Address		Apartment/Unit #		
City	State	Zip Code		
Phone: () _____		Email Address: _____		
Mailing Address: _____				
(if different than property address)				
Parcel ID Number: _____				
Date: _____ Time: _____ Weather Conditions: _____				
Inspection Item and Status				
Stormwater Pond Type: <input type="checkbox"/> Dry Pond <input type="checkbox"/> Micropool Pond				
<i>Inspection Frequency Key: A=annual; M=monthly; S=after major storms</i>				
Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Embankment and Emergency Spillway				
Vegetation healthy?	A/S			
Erosion on embankment?	A/S			
Animal burrows in embankment?	A/S			
Cracking, sliding, bulging of dam?	A/S			
Drains blocked or not functioning?	A/S			
Leaks or seeps on embankment?	A/S			
Slope protection failure functional?	A/S			
Emergency spillway obstructed?	A/S			
Erosion in/around emergency spillway?	A/S			
Other (describe)	A/S			
Riser and Principal Spillway				(describe type: concrete pipe, slotted weir, channel, etc.)
Low-flow orifice functional?	A/S			
Trash rack (Debris removal needed? Corrosion noted?)	A/S			
Sediment buildup in riser?	A			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Concrete/masonry condition (Cracks or displacement? Spalling?)	A			
Metal pipe in good condition?	A			
Control valve operation?	A			
Pond drain valve operation?	A			
Outfall channels function, not eroding?	A			
Other (describe)	A			
Sediment Forebays				
Sedimentation description				
Sediment cleanout needed (over 50 percent full)?	A/S			
Permanent Pool Areas (if applicable)				
Undesirable vegetation growth?	M			
Visible pollution?	M			
Shoreline erosion?	M			
Erosion at outfalls into pond?	M			
Headwalls and endwalls in good condition?	M			
Encroachment into pond or easement area by other activities?	M			
Evidence of sediment accumulation?	A			
Dry Pond Areas (if applicable)				
Vegetation adequate?	M			
Undesirable vegetation or woody plant growth?	M			
Excessive sedimentation?	A			
Hazards				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Inspector Comments:				
Overall condition of Facility: <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable				

Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

Attach Photo
Documentation

* Inspection shall be performed by a trained professional as defined in Section 4.0

Annual Maintenance Inspection Report (Form C) Proprietary BMPs

Applicant Information

Site Name: _____ Owner Change Since last inspection? ☐ Yes ☐ No

Owner Name: _____
Last First M.I.

Address: _____
Street Address Apartment/Unit #
City State Zip Code

Phone: () _____ Email Address: _____

Mailing Address: _____
(if different than property address)

Parcel ID Number: _____

Date: _____ Time: _____ Weather Conditions: _____

Inspection Item and Status

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Debris Removal				
Adjacent area free of debris?	M			
Inlets and Outlets free of debris?	M			
Facility (internally) free of debris?	M			
Vegetation				
Surrounding area fully stabilized? (no evidence of eroding material into proprietary BMP)				
Grass mowed?	M			
Water retention where required				
Water holding chambers at normal pool?	M			
Evidence of erosion?				
Sediment Deposition				
Filtration Chamber free of sediments?	A			
Sedimentation chamber not more than 50% full?	A			

[illegible]

Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

**Attach Photo
Documentation**

* Inspection shall be performed by a trained professional as defined in Section 4.0

Annual Maintenance Inspection Report (Form C) Bioretention

Applicant Information

Site Name: _____ Owner Change Since last inspection? ☐ Yes ☐ No

Owner Name: _____
Last First M.I.

Address: _____
Street Address Apartment/Unit #

_____ City State Zip Code

Phone: (_____) _____ Email Address: _____

Mailing Address: _____
(if different than property address)

Parcel ID Number: _____

Date: _____ Time: _____ Weather Conditions: _____

Inspection Item and Status	Inspection Date	Inspector	Remarks
1. General Appearance	2023-10-26	John Doe	Overall appearance is good.
2. Safety Features	2023-10-26	John Doe	All safety features are functional.
3. Performance	2023-10-26	John Doe	Performance is within acceptable limits.
4. Maintenance	2023-10-26	John Doe	Regular maintenance is performed.
5. Compliance	2023-10-26	John Doe	Compliance with standards is confirmed.

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Pre-Treatment Area				
Area free of debris?	<i>M</i>			
Standing water longer than 24 hours after a storm event?	<i>S</i>			
Bare soil or erosion?	<i>M/S</i>			
Excessive landscape waste/yard clippings?	<i>M</i>			
Inlet/Outlet Structures				
Inlets provide stable conveyance into the facility?	<i>A</i>			
Evidence of erosion at or around inlet?	<i>A</i>			
If connected to extended detention, is outlet to pond functioning properly?	<i>A</i>			
Other	<i>A</i>			
Basin				
Adjacent area fully stabilized (no evidence of eroding material into Bioretention area)?	<i>A</i>			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Plant height not less than design ponding depth?	A			
Adequate media layer present?	A			
Plant composition according to approved plan?	A			
Grass height not more than 6 inches?	M			
Vegetation overgrown?	A			
Invasive species/weeds present?	A			
Dead vegetation or exposed soil present?	A			
Maintenance access to facility?	A			
Excessive trash/debris/sediment?	A			
Evidence of erosion?	A			
Evidence of standing water (Ponding, Noticeable Odors, Water Stains, Algae)?	M			
If underdrain system, is it broken or clogged?	M			
Overflow structure free of blockage and operating properly?	A			
Other	A			
Hazards				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Mosquito proliferation?	M			
Is there encroachment on pervious area or easement by buildings or other structures?	A/S			
Inspector Comments:				
Overall condition of Facility: <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable				

Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

Attach Photo
Documentation

* Inspection shall be performed by a trained professional as defined in Section 4.0

Annual Maintenance Inspection Report (Form C)

Urban Bioretention

Applicant Information

Site Name: _____ Owner Change Since last inspection? ☐ Yes ☐ No

Owner Name: _____

Last	First	M.I.

Address: _____
 Street Address Apartment/Unit #

City	State	Zip Code
------	-------	----------

Phone: () Email Address:

Mailing Address: _____
(if different than property address)

Parcel ID Number: _____

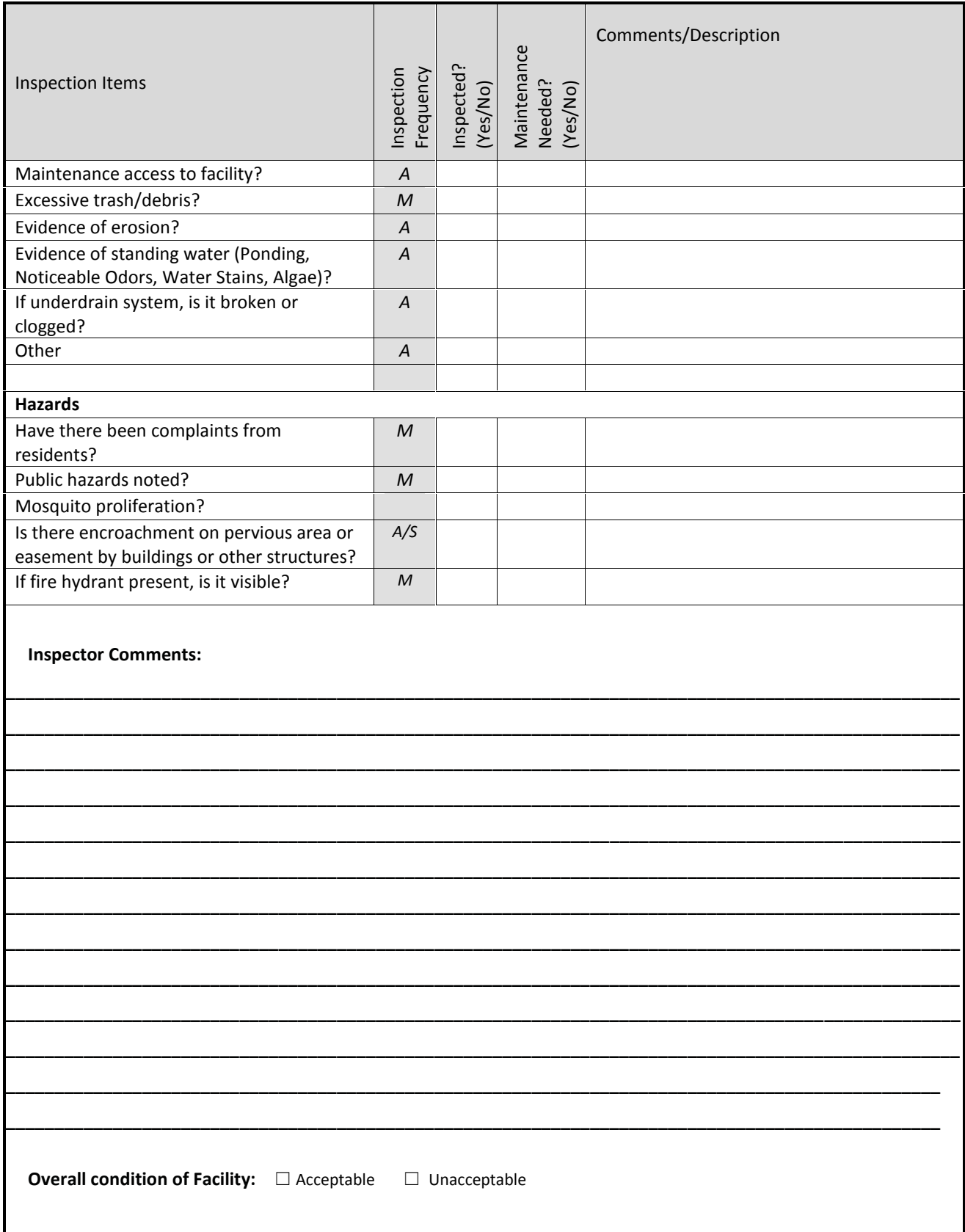
Date: _____ Time: _____ Weather Conditions: _____

Inspection Item and Status

Urban Bioretention Type: ☐ Stormwater Planters ☐ Green Street Swales/Planters ☐ Proprietary Planting Cells

Inspection Frequency Key: A=annual; M=monthly; S=after major storms

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Pre-Treatment Area (if present)				
Area free of debris?	M			
Inlets and outlets unobstructed?	M			
Standing water?	S			
Inlet/ Outlet Structures				
Inflow points (downspouts, curb cuts) provide stable conveyance into the facility?	A			
Inlets provide stable conveyance into facility?	A			
Evidence of erosion at/around inlet?	A			
Other	A			
Bioretention Area				
Vegetation overgrown?	A			
Invasive species/weeds present?	A			
Dead vegetation or exposed soil present?	A			



Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

**Attach Photo
Documentation**

* Inspection shall be performed by a trained professional as defined in Section 4.0

Annual Maintenance Inspection Report (Form C)

Infiltration Trench

Applicant Information				
Site Name: _____		Owner Change Since last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Owner Name: _____				
Last	First	M.I.		
Address: _____				
Street Address		Apartment/Unit #		
City		State	Zip Code	
Phone: () _____		Email Address: _____		
Mailing Address: _____ (if different than property address)				
Parcel ID Number: _____				
Date: _____		Time: _____		Weather Conditions: _____
Inspection Item and Status				
<i>Inspection Frequency Key: A=annual; M=monthly; S=after major storms</i>				
Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Debris Removal				
Trench surface clear of debris?	M			
Contributing area free of debris?	M			
Inlets/Inflow pipes free of debris?	M			
Overflow spillway clear of debris?	M			
Vegetation				
Mowing done when necessary?	M			
Unauthorized or inappropriate plantings?	A			
Fertilized per specification?	M			
Evidence of erosion?	M			
Contributing drainage area stabilized?	M			
Trees growing in the trench?	A			
Dewatering				
Trench dewatered between storms?	M			
Sediment traps, forebays, or pretreatment swales				
Adequately trapping sediment?	A			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Structural damage?	A			
Greater than 50% of original storage volume remaining?	A			
Sediment removal of trench				
Any evidence of sedimentation in trench?	A			
Are pea gravel/topsoil and top surface filter fabric functioning properly?	M			
Does sediment accumulation currently require removal?	A			
Inlets				
Good condition (no need for repair)?	A			
Evidence of erosion?	A			
Outlets/overflow spillway				
Good condition (no need for repair)?	A			
Evidence of erosion?	A			
Aggregate repairs				
Surface of aggregate clean?	A			
Top layer of stone in need of replacement?	A			
Trench in need of rehabilitation?	A			
Observation wells				
Evidence of clogging/failure to percolate? (Should percolate within 3 days.)	M			
Has drawdown rate been measured at observation well and is well capped?	A			
Hazards				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Inspector Comments:				
Overall condition of Facility: <input type="checkbox"/> Acceptable <input type="checkbox"/> Unacceptable				

Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

**Attach Photo
Documentation**

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Annual Maintenance Inspection Report (Form C) Water Quality Swale

Applicant Information				
Site Name: _____		Owner Change Since last inspection? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Owner Name: _____				
Last	First	M.I.		
Address: _____				
Street Address		Apartment/Unit #		
City		State	Zip Code	
Phone: () _____		Email Address: _____		
Mailing Address: _____ (if different than property address)				
Parcel ID Number: _____				
Date: _____		Time: _____		Weather Conditions: _____
Inspection Item and Status				
<i>Inspection Frequency Key: A=annual; M=monthly; S=after major storms</i>				
Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Debris Removal				
Facility and adjacent area free of debris?	M			
Inlets and outlets free of debris?	M			
Any dumping of yard wastes into facility?	M			
Litter (branches) removed?	M			
Vegetation				
Surrounding area fully stabilized? (no evidence of eroding material into swale)	M			
Soil media is adequately covering (18 inches) choker stone layer below?	M			
Grass mowed?	M			
Plant height not less than design water depth?	M			
Fertilized per specifications?	M			

Inspection Items	Inspection Frequency	Inspected? (Yes/No)	Maintenance Needed? (Yes/No)	Comments/Description
Plant composition according to approved plan?	M			
Unauthorized or inappropriate plantings?	A			
Plants healthy? (no diseased or dying vegetation)	M			
Evidence of plants stressed from inadequate watering?	M			
Filtration Capacity				
Clogging from oil or grease?	M			
Facility dewaterers between storms?	M			
Underdrain functioning properly?	M			
Check Dams and Energy Dissipaters/Sumps				
Any evidence of sedimentation buildup?	A,S			
Are sumps greater than 50% full of sediment?	A,S			
Any evidence of erosion and downstream toe of drop structures?	A,S			
Sediment Deposition				
Swale clean of sediments?	A			
Sediment not > 20% of swale design depth?	A			
Outlet/Overflow Spillway				
In good condition?	A			
Any evidence of erosion?	A			
Any evidence of blockages?	A			
Has facility been filled or blocked inappropriately?	A			
Hazards				
Have there been complaints from residents?	M			
Public hazards noted?	M			
Maintenance accesses free of hazards and fully operational?	M			

Inspector Comments:

Overall condition of Facility: ☐ Acceptable ☐ Unacceptable

Maintenance Action Needed

If any of the above Inspection Items are checked "Yes" for "Maintenance Needed," list Maintenance actions and their completion date below:

Maintenance Action Needed	Due Date

The next routine inspection is scheduled for approximately: _____
date

Inspected by*: (signature)

Inspected by*: (printed)

**Attach Photo
Documentation**

* Inspection shall be performed by a trained professional as defined in Section 4.0